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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,030	05/30/2001	Hiroyuki Baba	33626	6747

116 7590 11/21/2002

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EXAMINER

CHAPMAN JR, JOHN E

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary	Application No.	Applicant(s)	
	09/870,030	BABA ET AL.	
	Examiner	Art Unit	
	John E Chapman	2856	

-- The MAILING DATE of this communication app ars on the cover sheet with the correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 October 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 28-48 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3-4</u> .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. Applicant's election without traverse of Invention I in Paper No. 6 is acknowledged. Claims 28-48 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

2. The abstract of the disclosure is objected to because it should be narrative in form and should not consist of a run-on sentence. Correction is required. See MPEP § 608.01(b).

3. The specification is replete with idiomatic and grammatical errors too numerous to mention specifically. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of such errors are:
 - Page 4, line 27, "spurious" is unclear. Spurious what?
 - Page 4, line 27, "the characteristic" is unclear. What characteristic?
 - Page 4, line 31, "acoustical reason" is unclear.
 - Page 5, lines 3-6, the sentence is incomprehensible.
 - Page 5, line 10, "common dimensions" is unclear. Dimensions common with what?
 - Page 5, line 14, "excellent in characteristic" is unclear.

4. The summary of the invention on page 5-12 is objected to because it should be a brief summary or general statement of the invention. It should not merely copy the claims, as such

does not contribute to an understanding of the invention. See MPEP § 608.01(d). Appropriate correction is required.

5. The disclosure is objected to because of the following informalities:

Page 14, line 27, the terms in the specification should be defined in the specification and not in the claims.

Page 32, lines 29-30, “open end of the closed space” is unclear. A closed space by definition does not have an open end.

Appropriate correction is required.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over either JP 62-10356 or the admitted prior art.

Regarding claims 1, 9 and 12-17, the only difference between the claimed invention and the prior art consists in the height of the sensor casing 1 of Fig. 1 of JP 62-10356 (or sensor casing 801 of Fig. 25 of admitted prior art) relative to its width. A mere change in size or shape is

generally recognized as being within the level of ordinary skill in the art. See *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 2 and 10-11, the spacing between the plate and the top and bottom walls of the casing comprises a mere change in size or shape.

Regarding claim 3, it would have been obvious to place the piezoelectric transducer on either surface of the oscillating plate, since it would have been obvious to one of ordinary skill in the art that either would function in substantially the same manner to produce substantially the same result.

Regarding claim 4, note Fig. 3 of JP 62-10356 (or Fig. 27 of admitted prior art).

Regarding claim 5, note the above remarks regarding claims 3 and 4.

Regarding claims 6-8, it would have been obvious to place the piezoelectric elements on both surfaces of the oscillating plate in order to duplicate the signal and thereby increase the signal-to-noise ration.

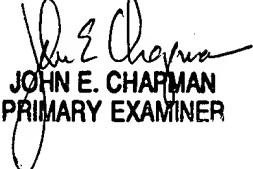
Regarding claim 10-11, the spacing between the plate and the top and bottom walls of the casing comprises a mere change in size or shape.

note the above remarks regarding claims 3 and 4.

Regarding claims 18-27, note Fig. 3 of JP 62-10356 (or Fig. 27 of admitted prior art).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Chapman whose telephone number is (703) 305-4920.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.


JOHN E. CHAPMAN
PRIMARY EXAMINER

jec
November 20, 2002